

Summer 2002

Indiana Utility Regulatory Commission
May 10, 2002

2001 Summer Peak

■1,047 MW

- ✓ HE 17:00 on August 8, 2001
- Record peak for Hoosier member load
- ✓ Prior peak of 1,040 MW set in July 1999



Projected Summer Peaks (MW)

Load	Jun	Jul	Aug
Members	1,014	1,088	1,052
WVPA	182	212	212
EKPC	50	50	50
Troy Municipal	2	2	2
Unit Sales	400	400	400
10% Reserve	<u>125</u>	135	132
Total Requirement	1,773	1,887	1,848



Projected Resources (MW)

Resource	Jun	Jul	<u>Aug</u>
Base Generation	1,248	1,244	1,242
Fixed Price Contracts <u>525</u>		643	<u>606</u>
Total Resources	1,773	1,887	1,848



Projected Resources

Base Generation

- ✓ Major outage at Merom 2 this spring
- Expect all Merom and Ratts units to be fully operational by June 9



Projected Resources

■ Fixed Price Contracts

✓ Hoosier has entered into a contract with its marketing partner to satisfy peaking requirements.

Worthington Generation LLC

✓ Entire output (174 MW) has been classified as a MISO "designated" resource - highest level of firm service



Risk Management Strategies

- Williams Agreement
- Unit Contingent Insurance
- Temporary Cooling Towers
- Summer Preparation Outages
- Unit De-rate Risk Management



Williams Agreement

- **1999 2003**
- Provides all capacity and energy shortfall beyond existing generation capability
- Manages volume variance
- Manages price variance
- Hoosier retains operating risk



ACE USA (Cigna)

- Unit contingent insurance
- Covers 12 months
- ■\$100 per MWh strike price
- ■300 MW per Merom unit
- ■125 MW per Ratts unit



Cooling Towers

- Leased for the Ratts units
- Removes risk of plant de-rates due to river temperatures



Summer Preparation Outages

- Schedule unit outages to prepare for summer operation
- Air heater cleaning, condenser cleaning, etc.



Unit De-Rates

- ■Normal Range of 20 to 50 MW
- Primary causes:
 - √ condenser pluggage
 - √ turbine back pressure
 - ✓ air heater pluggage
 - √ fuel related
 - √ thermal limits



Products to Cover Unit De-Rates

■20 MW call on Worthington

- ✓ Part of Williams Agreement
- ✓ Estimated variable cost < \$45 per MWh</p>

■30 MW call

- ✓ market product at fixed strike price
- ✓ supplied from various sources but likely from within ECAR



Distributed Generation Project

- ■30 MW installation
- Diesel unit power modules 1.5 1.8 MW each
- Placed at Hoosier's existing Fairview and Midway substations



Transmission Status

- Under normal operating conditions, transmission constraints are not expected on Hoosier system.
- Upgrade of Bloomington 345/230 kV transformer completed late summer 2001



Midwest ISO

- Will improve overall reliability of transmission system
- No impact on Hoosier's resource mix for Summer 2002
- Experiencing some problems; coordination with utilities is necessary to resolve



Substation Status

■ Since summer of 2001:

- ✓ Increased capacity in 10 substations
- ✓ Built 3 new substations (to serve increased member load)



Efforts to Reduce Outages

- 200 miles and 1,500 acres of right-ofway maintained in 2001
- Convert microwave communications system from analog to digital
 - √3 year program
 - √ clearer, more error free transmissions
 - ✓ increase reliability



Tracking Outages

- Members are responsible for end-use customers
- Hoosier identifies and tracks at the substation level
- Joint communication procedures in place to relay information to members and the public

